

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

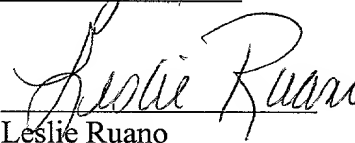
Applicant: Shi-Chang Wooh
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For: FLAW DETECTION
SYSTEM USING
ACOUSTIC DOPPLER
EFFECT

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Box Patent Application
Assistant Commissioner for Patents
Washington, DC 20231

CERTIFICATE OF MAILING

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Leslie Ruano

PRELIMINARY AMENDMENT

In the claims:

Please cancel claims 1, 5-6, 17, 19 and 21.

Please add claims 22-25 as follows:

22. A flaw detection system using acoustic Doppler effect for detecting flaws in a medium wherein there is relative motion between the medium and system comprising:

transducer means, spaced from the medium to be inspected, which transmit optical energy for introducing to and sensing from the medium an acoustic signal

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that propagates in said medium at a predetermined frequency; and

means, responsive to the sensed propagating acoustic signal, for detecting in the sensed acoustic signal the Doppler shifted frequency representative of a flaw in the medium.

23. The flaw detection system using acoustic Doppler effect of claim 5 in which said transducer includes a laser for transmitting said optical energy.

24. A flaw detection system using acoustic Doppler effect for detecting flaws in a medium wherein there is relative motion between the medium and system comprising:

transducer means, spaced from the medium to be inspected, for introducing to and sensing from the medium an acoustic signal that propagates in said medium at a predetermined frequency said transducer means including a laser vibrometer interferometer for sensing the acoustic signal propagating in the medium;

25. A flaw detection system using acoustic Doppler effect for detecting flaws in a medium wherein there is relative motion between the medium and system comprising:

transducer means, spaced from the medium to be inspected, for inducing an acoustic signal to propagate in the medium at a predetermined frequency and sensing the propagating acoustic signal in the medium; and said transducer means including a

transmitter and a receiver and said transmitter including a laser for locally heating the medium to generate acoustic signals; and

means, responsive to the sensed propagating acoustic signal, for distinguishing the Doppler shifted frequency representative of a flaw in the medium.

REMARKS

In the Office Action mailed on April 25, 2000, in the parent case, the Examiner stated that three patentability distinct species of the invention were claimed. The claims of the subject application are directed to Specie III as indicated by the Examiner and have been rewritten in independent form through the above amendments.

If for any reason this Preliminary Amendment is found to be incomplete, or if at any time it appears that a telephone conference with counsel would help advance prosecution, please telephone the undersigned or his associates, collect in Waltham, Massachusetts, (781)890-5678.

Respectfully submitted,



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